

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-3. (Cancelled)
4. (Currently Amended) The method of Claims 21 or 22, wherein the functional UI software modules enable at least one of:
 - (a) a network communication feature for communicating data associated with a user interaction;
 - (b) a data entry feature for enabling a user to enter data to at least one of a game, a simulation, ~~and an~~ or an application program;
 - (c) a data display feature for enabling a user to view data that is obtained by and generated by one of the plurality of user interface modules; and
 - (d) an audio feature.
5. (Cancelled)
6. (Cancelled)
7. (Currently Amended) The method of Claims 21 or 22, further comprising a step for causing at least one of the functional UI software modules to specify a user interface object to at least one of the UI plug-in software modules, the specified user interface object providing a sensory interaction with the user.
8. (Currently Amended) The method of Claim 8, further comprising a step for causing the at least one UI plug-in software module to select data from a predefined set of sensory data, the selected data corresponding to the user interface object specified by the at least one functional UI software module.
9. (Previously Presented) The method of Claim 8, further comprising a step for modifying the predefined set of sensory data during a runtime operation.

10–14. (Cancelled)

15. (Currently Amended) The system of Claim 23, wherein the functional UI software modules enable at least one of:

(a) a network communication feature for communicating data associated with a user interaction;

(b) a data entry feature for enabling a user to enter data to at least one of a game, a simulation, ~~and an~~ or an application program;

(c) a data display feature for enabling a user to view data that is obtained by and generated by one of the plurality of user interface modules; and

(d) an audio feature.

16. (Cancelled)

17. (Cancelled)

18. (Currently Amended) The system of Claim 23, wherein at least one of the functional UI software modules specifies a user interface object to at least one of the UI plug-in modules, the specified user interface object providing a sensory interaction with the user.

19. (Previously Presented) The system of Claim 18, wherein the predefined set of sensory data is modified during a runtime operation.

20. (Cancelled)

21. (Currently Amended) In a digital computing system that includes a main control program exemplified by any of a game code module, an application program, a simulation or an operating system, and wherein the main control program communicates with one or more functional user interface (UI) modules for data processing of a type which does not require human sensory interaction with a user of the computing system, as exemplified by displaying data entry fields, providing audio indications, video indications or other human perceptible sensory interface actions, a method of enabling change to any of the human sensory interactions such as visual data display, audio output or video display, without having to change the functional UI modules or main control program, comprising:

providing a common communication scheme for use between various types of UI modules, including ~~such as~~ functional UI modules for providing data for presentation to a user, and one or more UI plug-in software modules for implementing UI features that by determining how to provide human sensory interaction ~~such through mechanisms such~~ as visual display, video display, ~~or audio~~ audio display or any combination of the foregoing;

networking a user interface (UI) engine having an engine interface with a main control program running on the computing system so as to provide communication of commands between the main control program and the UI engine;

networking to the UI engine and to the main control program and/or other network components one or more functional UI software modules for implementing UI features using functions that do not directly ~~involve~~ identify how to provide human sensory interaction with a user;

networking to the UI engine one or more UI plug-in software modules for implementing UI features that receive input from the one or more functional UI software modules and determine how to provide human sensory interaction through mechanisms such as visual display, video display, ~~or audio~~ audio display, or any combination of the foregoing, such that the determination of how to provide human sensory interaction is determined by the one or more UI plug-in software modules and not by the main control program and/or the one or more functional UI software modules;

said one or more functional UI software modules communicating with the UI engine using said common UI communication scheme and thereby providing to one or

more functional UI software modules or to the main control program human sensory interaction as required by either the one or more functional UI software modules or the main control program; and

changing, adding or deleting one or more of the UI plug-in software modules so as to change the human sensory interaction of one or more functional UI software modules or the main control program, but otherwise leaving one or more functional UI software modules and main control program unchanged.

22. (Currently Amended) In a digital computing system that includes a main control program exemplified by any of a game code module, an application program, a simulation or an operating system, and wherein the main control program communicates with one or more functional user interface (UI) modules for data processing of a type which does not require human sensory interaction with a user of the computing system, as exemplified by displaying data entry fields, providing audio indications, video indications or other human perceptible sensory interface actions, a computer program product comprising a computer-readable medium having executable code for causing the computing system to execute a method of enabling change to any of the human sensory interactions such as visual data display, audio output or video display, without having to change the functional UI modules or main control program, and wherein the method comprises:

providing a common communication scheme for use between various types of UI modules, including such as functional UI modules for providing data for presentation to a user, and one or more UI plug-in software modules for implementing UI features that by determining how to provide human sensory interaction such through mechanisms such as visual display, video display, or audio-audio display or any combination of the foregoing;

networking a user interface (UI) engine having an engine interface with a main control program running on the computing system so as to provide communication of commands between the main control program and the UI engine;

networking to the UI engine and to the main control program and/or other network components one or more functional UI software modules for implementing UI features using functions that do not directly involve-indentify how to provide human sensory interaction with a user;

networking to the UI engine one or more UI plug-in software modules for implementing UI features that receive input from the one or more functional UI software modules and determine how to provide human sensory interaction through mechanisms such as visual display, video display, or audio-audio display, or any combination of the foregoing, such that the determination of how to provide human sensory interaction is determined by the one or more UI plug-in software modules and not by the main control program and/or the one or more functional UI software modules;

said one or more functional UI software modules communicating with the UI engine using said common UI communication scheme and thereby providing to one or more functional UI software modules or to the main control program human sensory interaction as required by either the one or more functional UI software modules or the main control program; and

changing, adding or deleting one or more of the UI plug-in software modules so as to change the human sensory interaction of one or more functional UI software modules or the main control program, but otherwise leaving one or more functional UI software modules and main control program unchanged.

23. (Currently Amended) In a digital computing system that includes a main control program exemplified by any of a game code module, an application program, a simulation or an operating system, and wherein the main control program communicates with one or more functional user interface (UI) modules for data processing of a type which does not require human sensory interaction with a user of the computing system, as exemplified by displaying data entry fields, providing audio indications, video indications or other human perceptible sensory interface actions, a modular software interface system for enabling change to any of the human sensory interactions such as visual data display, audio output or video display, without having to change the functional user interface modules, comprising:

a UI engine having an engine interface, and the UI engine being networked through the engine interface with a main control program running on the computing system so as to provide communication of commands between the main control program and the UI engine, and the UI engine providing a common communication scheme for use between other UI modules;

one or more functional UI software modules for implementing UI features using functions that do not directly ~~involve~~ identify how to provide human sensory interaction with a user, said one or more functional UI software modules being networked so as to communicate with;

- i) the UI engine using said common UI communication scheme, and
- ii) the main control program and/or other network components; and

one or more UI plug-in software modules for implementing UI features that determine how to provide human sensory interaction through mechanisms such as visual display, video display, ~~or audio~~ audio display, or any combination of the foregoing, and said one or more functional UI software modules being networked so as to communicate with the UI engine using said common UI communication scheme, the one or more UI plug-in software modules providing human sensory interaction as required by either the main control program or other functional UI software modules in a manner such that the determination of how to provide sensory interaction is determined by the one or more UI plug-in software modules and not by the main control program and/or the one or more functional UI software modules, but the UI plug-in software modules being otherwise

adapted to be changed with affecting or requiring changes to the main control program or other functional UI software modules.

24. (New) The system of claim 23, the system further comprising:
one or more setting files, each setting file providing a predefined set of sensory data to be used by the one or more UI plug-in software modules to determine how to provide sensory interaction.

25. (New) The system of claim 24, wherein the main program, when executed, identifies which of the one or more functional UI software modules, the one or more UI plug-in software modules, and which of the one or more setting files to use when presenting data generated by, or at the request of, the main control program.